

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mark Leslie SMYTHE et al.

Title: PROTEIN ENGINEERING

Appl. No.: Unassigned

Filing Date: 04/21/2001

Examiner: Unassigned

Art Unit: Unassigned

NS/A
Plunkett
9/4/01

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with 37 CFR §1.121, please substitute for original claims 7, 8, 11, 12, 14, 16-18 and 23 the following rewritten versions of the same claims, as amended. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made."

IN THE CLAIMS:

6. (Amended) The method of claim 5, wherein the location and orientation of a side-chain of each said amino acid residue of said framework protein and the location and orientation of a side-chain of each of said two or more amino acid residues of said sample protein is simplified as a respective $\text{C}\alpha\text{-C}\beta$ vector.

7. (Amended) The method of claim 1, wherein the $\text{C}\alpha\text{-C}\beta$ vector is in the form of a distance matrix representation.

8 (Amended) The method of claim 1, further including the step of modifying an amino acid sequence of said framework protein which corresponds to a